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Robert Bosch LLC  
1800 W. Central Road  
Mount Prospect, IL 60056

EXAMINER
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MARMOR II, CHARLES ALAN

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* STEPHEN J. BROWN

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Appeal 2015-004254  
Application 13/171,832  
Technology Center 3700

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Before JOHN C. KERINS, STEFAN STAICOVICI, and LEE L. STEPINA,  
*Administrative Patent Judges.*

STEPINA, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Stephen J. Brown (Appellant) appeals under 35 U.S.C. § 134 from the Examiner's decision to reject claims 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

CLAIMED SUBJECT MATTER

The claims are directed to managing a medical condition. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method for management of a medical condition, comprising the steps of:

(a) measuring data representative of the medical condition of a user using a measuring device, wherein said measuring device is separate from a portable microprocessor-based unit;

(b) receiving said data at said portable microprocessor-based unit from said measuring device;

(c) running a program of instructions that uses said data on said portable microprocessor-based unit, wherein (i) said program of instructions presents an interactive presentation to said user via a display screen of said portable microprocessor-based unit and (ii) said interactive presentation reinforces compliance with a management plan to treat said medical condition by presenting one or more potential future negative consequences of the disease in said interactive presentation in response to said data being outside a range; and

(d) transmitting one or more results of said interactive presentation from said portable microprocessor-based unit to a server computer via a communications network, wherein said server computer is remotely located from said portable microprocessor-based unit.

## REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Mazeski	US 4,332,566	June 1, 1982
Quy	US 5,601,435	Feb. 11, 1997
Worthington	US 5,822,715	Oct. 13, 1998
Goodman	US 5,827,180	Oct. 27, 1998

## REJECTIONS

(I) Claims 1–10 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.<sup>1</sup>

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<sup>1</sup> The Examiner entered this rejection as a New Ground of Rejection on pages 2–3 of the Answer (mailed Dec. 24, 2014).

(II) Claims 1–5, 8, 10–15, 18, and 20 are rejected under 35 U.S.C. § 103(a) as unpatentable over Worthington and Goodman.

(III) Claims 6, 7, 16, and 7 are rejected under 35 U.S.C. § 103(a) as unpatentable over Worthington, Goodman, and Quy.

(IV) Claims 9 and 19 are rejected under 35 U.S.C. § 103(a) as unpatentable over Worthington, Goodman, and Mazeski

## OPINION

### *Rejection (I)*

The Examiner finds that “[t]he claim(s) is/are directed to the abstract idea of a mathematical relationship relating medical data measured to displayed consequences in an interactive display.” Ans. 3. The Examiner states that any additional elements amount to “generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities . . . [that] do not provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself.” *Id.*

Appellant argues that, “rather than simply a ‘generic computer structure’ as alleged by the Examiner, claim 1 requires a variety of *different* and *specialized* devices in a cohesive architecture.” Reply Br. 3–4.

Appellant asserts that “the Examiner’s argument ignores the specific relationships and functions delegated by the claim to the various specialized components which results in a novel manner in which an architecture functions to provide a method for management of a medical condition.” *Id.*

at 4. Appellant thus argues that “contrary to the Examiner’s argument, all of the devices required by the claim are not simply a single generic structure. Nor are the various components individually generic computer structures.” *Id.*

To determine whether a claim is directed to ineligible subject matter, we apply the two-step test explained in *Alice Corp. Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347, 2355 (2014). First, we determine whether the claims at issue are directed to a patent-ineligible concept such as an abstract idea. *Id.* Next, we “examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Id.* at 2357.

We agree with the Examiner that claim 1 is directed to the abstract idea of the mathematical manipulation of measured medical data. In this regard, “[w]ithout additional limitations, a process that employs mathematical algorithms to manipulate existing information to generate additional information is not patent eligible.” *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014).

As for step two, we look to whether the steps recited in claim 1, taken individually, and as an ordered combination, add enough to claim 1 to transform the recited abstract idea into patent-eligible subject matter. Here, the Examiner concludes that claim 1 does not recite an element or combination of elements that amounts to significantly more than a claim upon the abstract idea itself, but does not make any findings addressing why each element is considered “generic computer structure that serves to perform generic computer functions.” *See* Reply Br. 3–4. Because the

Examiner has not provided an analysis as to why the recited measuring device and portable microprocessor-based unit running a program of instructions that presents an interactive presentation to a user via a display screen of the portable microprocessor-based unit are found to be generic, the basis for the Examiner's findings are not apparent. We therefore reverse the Examiner's rejection of claim 1 as directed to patent ineligible subject matter. Likewise, because the Examiner did not analyze any of claims 2–10, we reverse the Examiner's rejection of these claims as well. *See id.* at 9.

*Rejection (II)*

Claim 1 recites, in relevant part, “presenting one or more potential future negative consequences of the disease in said interactive presentation in response to said data being outside a range.” Appeal Br. 30 (Claims App.). Claim 11 includes a substantially similar limitation. *Id.* at 32–33.

The Examiner finds that Worthington discloses most of the limitations of claim 1 including the above limitation. Final Act. 4 (citing Worthington, col. 6, ll. 13–24). The Examiner considers that the device of Worthington “is an interactive display because the user controls what is displayed and what is input using the menu.” *Id.* The Examiner states that, “the potential future negative consequence of the disease is being interpreted as the future high glucose value in combination with the alert on a display (14).” *Id.*

Appellant argues that, “[t]he only consequence of data being outside of a range as disclosed by Worthington, is the audible alerting of the patient.” Appeal Br. 6. Appellant asserts that an audible alert is not an “interactive presentation.” *Id.* Appellant thus argues that “because an

audible alert is not an interactive display, Worthington does not disclose presentation of potential future negative consequences of the disease in said interactive presentation in response to said data being outside a range as required by claim 1.” *Id.*

The Examiner responds that “the display of the curve (50) provides the potential negative future consequence of showing that the patient’s blood glucose will fall outside of an optimal range and result in a hypoglycemic or hyperglycemic event.” Ans. 4. The Examiner states that “[t]he alarm further reinforces such potential future negative consequence.” *Id.*

Appellant replies that the Specification describes an embodiment of a potential future negative consequence and discloses that in the course of a video game a “plane or balloon crashes to visually depict a bad consequence.” Reply Br. 12 (citing Spec. 27, ll. 1–31; Figs. 14–15).

Appellant asserts that crashing is particular “to a situation wherein a data is out of the desired range, not simply rendering of the data as being outside of the range.” *Id.* Appellant thus argues that, “the specification describes a ‘negative consequence’ which is *not the same as data outside of a range.*” *Id.* Appellant asserts that the claims must be construed “to require the ‘negative consequence’ to be something other than simply a depiction of the ‘data,’” so that all of the words in the claims are given meaning, and that to do otherwise is unreasonable. *Id.*

We agree with Appellant that the claims require that the “negative consequence” be something more than simply a depiction of data. The Specification discloses an embodiment where a “pilot needs to follow proper diet and exercise regimen to avoid crashing a plane or balloon which he is

flying.” Spec. 27, ll. 6–8. If the pilot eats the wrong foods, this “causes blood glucose level to increase and the plane or balloon starts gaining altitude uncontrollably.” *Id.* at 27, ll. 10–12. As such, one of ordinary skill in the art would understand that not only is there an increase (or decrease) in blood glucose level, but also, there is the negative consequence of the plane crashing, or gaining altitude uncontrollably. Worthington depicts a graph of predicted blood glucose that is displayed as a curve over time. Worthington, Fig. 1. The graph “includes a hypoglycemic line 52 indicating a hypoglycemic threshold of the patient and a hyperglycemic line 53 indicating a hyperglycemic threshold of the patient.” *Id.* at col. 6, ll. 17–20; Fig. 1. Worthington also discloses an audio transducer “for audibly alerting the patient when a predicted future blood glucose value lies below the hypoglycemic threshold.” *Id.* at col. 6, ll. 21–24. However, neither the alert nor the hypoglycemic event triggering the alert presents a potential future *negative consequence* of the disease. The hypoglycemic event is a threshold level indicating that there is a low blood glucose level, and the alert is an audible warning that the threshold has been exceeded, “alerting the patient to possible future hypoglycemia.” *Id.* at col. 6, ll. 58–60. That is, the data of Worthington only indicates that the disease is present, which is why the person is monitoring blood glucose in the first place. Worthington does not present a potential future *negative consequence* of the disease if the disease is not properly managed, i.e., when the data is outside the range. In other words, “presenting one or more potential future negative consequences of the disease in said interactive presentation in response to said data being outside a range” is not the same as “showing that the patient’s blood glucose



will fall outside of an optimal range and result in a hypoglycemic or hyperglycemic event.” Ans. 4.

For these reasons, we reverse the Examiner’s rejection of independent claims 1 and 11, as well as of claims 2–5, 8, 10, 12–15, 18, and 20, dependent from claims 1 and 11, as unpatentable over Worthington and Goodman.

*Rejections (III) and (IV)*

The Examiner does not rely on Quay or Mazeski in any manner that would remedy the deficiencies in the rejection based on Worthington and Goodman discussed *supra*. See Final Act. 5–6. Thus, for the same reasons, we reverse the Examiner’s rejection of claims 6, 7, 16, and 17 as unpatentable over Worthington, Goodman, and Quay, and the rejection of claims 9 and 19 as unpatentable over Worthington, Goodman, and Mazeski.

DECISION

The Examiner’s decision to reject claims 1–20 is reversed.

REVERSED